## 2012 MAPA Traffic Growth Report

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The growth analysis in this publication is based on data compiled by MAPA in cooperation with the cities of Bellevue Council Bluffs, La Vista, Omaha, Papillion; counties of Douglas, Pottawattamie, Sarpy; Iowa DOT, Nebraska DOR, FHWA and FTA.

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## MAPA Traffic Growth Report: Introduction and Methodology

The Traffic Growth Report is published periodically by the Metropolitan Area Planning Agency (MAPA) as part of its on-going process of monitoring transportation in the Omaha-Council Bluffs metropolitan area. This report provides a unique analysis of the change in vehicular traffic from a regional and sub-regional perspective. Traffic is listed in terms of total VMT (vehicle miles traveled), which is calculated by multiplying the length of a road segment by the average weekday daily traffic (AAWT). Statistics in the Traffic Growth Report are primarily derived from volumes shown on the 2012 Traffic Flow Map. For more specific information regarding traffic along or through particular streets or intersections, please consult the MAPA 2012 Traffic Flow Map.

The 2012 Traffic Growth Report adopts a slightly different methodology to measure the changes in VMT at regional and subregional levels. Traffic Analysis Districts (TADs) are bound by major roadways and are the level to which data is aggregated for this report. Additionally, rates of change within a given TAD are calculated based on the change at count locations where new count data has been collected since the last report (i.e. a location with a 2012 traffic count would be compared back to the AAWT value in 2010). As such the VMT per TAD and rates of change are representative only of a sampling of those locations at which new data was available for this report.

The Regional Traffic Patterns figure was created using data compiled from the MAPA Intersection Report, the MAPA Interchange Report, and the MAPA Travel Demand Model. Traffic flow recorded at each intersection was processed using ArcGIS Spatial Analyst and turned into an interpolated flow surface that demonstrates intersection connectivity. Additional traffic flow at each interchange is displayed with a corresponding point magnitude. Finally, road segments from the travel demand model where the traffic flow exceeds capacity (i.e. the amount of traffic that a given segment can support during normal conditions) show areas for potential capacity improvement. When considered together these three elements provide insight into transportation network performance and traffic flow trends in the region.

Pages 5-8 of the report show average growth rates by Automatic Traffic Recorder (ATR) station over the period 2002 to 2013. The maximum average growth rate of around $5.79 \%$ is observed at station N1 (North of Gretna). The ATR station on I-92 South of Ave N Council Bluffs experienced an average rate of decrease of over $3 \%$ during the same period.

The total Douglas County VMT grew by 1\%, Sarpy County VMT remained nearly level and Pottawattamie County VMT decreased by $2 \%$ from 2010. The western part of Omaha region along the Dodge Expressway and western Sarpy County continued to grow in accordance with the continued new development in the area. Additionally some areas such as the central parts of Sarpy County showed a decrease in traffic.





## MAPA Area Continuous Traffic Counts

The States of Nebraska and lowa both have traffic counting sites that count vehicles on a continous basis, for all 365 days of the year, in the Omaha-Council Bluffs metro area. These counters, called "Automatic Traffic Recorders" (ATRs), provide an excellent source of traffic data. Traffic data and growth trends for the locations are shown below.

There are currently 15 ATRs in the region, with 9 located inNebraska side and 5 located in lowa (one location in lowa was discontinued in after 2012). ATRS are located on freeways and arterials in urban, suburban, and rural areas. Historically, these numbers have been reasonably consistent with data from MAPA's Traffic Growth Report. Between 2010 and 2012, the ATR data decreased $2.67 \%$. This differs slightly with MAPA's traffic growth analysis that showed a neglible change from 2010. Some of this may be attributable to decreases in outlying rural ATR locations not include in MAPA's traffic growth analysis.Newly available data for the metro area in 2013 shows a moderate increase of $1.58 \%$ between 2012 and 2013 for the MAPA region.

The charts on the following pages track the growth of traffic on roadways monitored by ATRs in the MAPA region. The charts and graphs in this section only include data from ATRs for which a continuous set of data for the period reflected on each graphic. As such these charts reflect a sampling of the available ATR data but allow us to make comparisons and generalizations for these periods. Additional graphs illustrate the average annual rates of change for the entire region and for each traffic record over the 17 year period and since the last MAPA Traffic Growth Report.

|  | Iowa ATR Locations |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Route | Location | 2002 | 2004 | 2006 | 2008 | 2010 | 2012 | 2013 |
| 1 | I-29/80 | . 6 mi West of IA 192 | 76,024 | 75,623 | 79,350 | 79,516 | 75,988 | 75,521 | N/A |
| 2 | IA 192 | South of Ave N | 10,061 | 9,442 | 9,047 | 8,858 | 8,719 | 6,004 | 5,949 |
| 3 | 1-29 | 3 mi North of South I-680 Jct | 21,070 | 21,319 | 21,484 | 21,033 | 20,593 | 19,730 | 19,907 |
| 4 | 1-29 | 4 mi South of US-34 Jct (Pacific) | 11,917 | 12,101 | 12,495 | 12,300 | 11,868 | 12,008 | 12,337 |
| 5 | 1-80 | 1.5 mi West of Co M-16 (Shel by) | 22,379 | 22,496 | 22,670 | 22,752 | 22,950 | N/A | 23,070 |
| 6 | 1-680 | 6.4 mi West of I-80 | N/A | N/A | N/A | N/A | 6,196 | 5,947 | 5,913 |
| Nebraska ATR Locations |  |  |  |  |  |  |  |  |  |
|  | Route | Location | 2002 | 2004 | 2006 | 2008 | 2010 | 2012 | 2013 |
| 7 | US 6 | North of Gretna | 9,156 | 11,703 | 13,424 | 15,470 | 15,048 | 16,162 | 17,178 |
| 8 | 1-80 | Just South of Douglas-Sarpy Line | 53,750 | 56,682 | 60,285 | 57,913 | 60,148 | 60,537 | 63,187 |
| 9 | US 75 | 30th St South of I-680 in Omaha | 14,932 | 14,708 | 14,607 | 14,549 | 14,218 | 13,544 | 13,242 |
| 10 | 1-80 | 1-80 at 42nd St | 185,153 | 166,966 | 168,298 | 170,739 | 164,863 | 169,359 | 172,229 |
| 11 | N-64 | At 160th St | N/A | N/A | N/A | 22,417 | 22,584 | 23,678 | 24,415 |
| 12 | US 75 | Just North of Jct N-370 Bellevue | 43,806 | 44,441 | 44,273 | 42,463 | 43,712 | 44,744 | 45,076 |
| 13 | 1-680 | Mormon Bridge Omaha | 16,046 | 16,254 | 15,656 | 15,401 | 16,000 | 14,004 | 14,053 |
| 14 | 1-680 | 1-680 North of Dodge St | 70,000 | 73,000 | 80,095 | 80,077 | 84,107 | 83,817 | 85,175 |
| 15 | 1-80 | West of Gretna Interchange | 36,595 | 39,500 | 41,400 | 38,889 | 40,830 | 41,242 | 42,237 |



## MAPA Regional Automatic Traffic Recorder Counts, 1995-2012



## Annual Rate of Change of Automatic Traffic Recorders (ATR)

 1995-2012 for Metropolitan Region

## Annual Rate of Change of Automatic Traffic Recorders (ATR) 1995-2012 by State



## Annual Rate of Change of Automatic Traffic Recorders by Station 1995-2012



| A-5 | US 6 North of Gretna | A-26 | US 75 Just North of Jct. N-370 in Bellevue | 811 | IA 192 S of Ave N Council Bluffs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A-17 | I-80 Just South of Douglas - Sarpy Line | A-32 | l-680 Mormon Bridge in Omaha | 100 | I-29 3.0 MI N of S JCT I 680 Honey Creek |
| A-23 | US 75/30th Street South of I-680 in Omaha | A-40 | I-680 North of Dodge Street in Omaha | 102 | I-29 4.0 MI S of US 34 Pacific Jct. |
| A-24 | I-80 at 36th Street in Omaha | A-56 | I-80 West of Gretna Interchange | 110 | I-80 1.5 MI W of Co M16 Shelby |
| A-25 | N-64 At 160th Street | 704 | I-29/80 .6 MI W OF IA 192 Council Bluffs | 125 | I-680 6.4 mi West of I-80 |

## Annual Growth Rate of Automatic Traffic Recorders by Station 2010-2012



## Automatic Traffic Recorder Station Index

| A-5 | US 6 North of Gretna | A-26 | US 75 Just North of Jct. N-370 in Bellevue | 811 | IA 192 S of Ave N Council Bluffs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A-17 | I-80 Just South of Douglas - Sarpy Line | A-32 | I-680 Mormon Bridge in Omaha | 100 | I-29 3.0 MI N of S JCT I 680 Honey Creek |
| A-23 | US 75/30th Street South of I-680 in Omaha | A-40 | I-680 North of Dodge Street in Omaha | 102 | $\mathrm{I}-29$ 4.0 MI S of US 34 Pacific Jct. |
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